



University of Hormozgan



Educational and Behavioral
Research Center

Relationship between Knowledge Sharing and Innovative Tendencies and Job Performance among High School Principals in Bandar Abbas

Mahnoosh Abedini 

Assistant Professor and Faculty Member, Department of Educational Administration, Farhangian University, Tehran, Iran,

Email: mahnoosh_abedini@yahoo.com

Article Info

Article type:

Research Article

Article history:

Received 17 Mar. 2024

Received in revised form 11

Apr. 2024

Accepted 15 Sep. 2024

Published online 01 Dec. 2024

Keywords:

Explicit knowledge,

Implicit knowledge,

Innovative tendencies,

Job performance

ABSTRACT

Objective: In the present study the relationship between knowledge Sharing and innovative tendencies and job performance among high school principals in Bandar Abbas.

Methods: A descriptive survey was used for the study. For this purpose, 93 high school principals participated in this study. Participants filled explicit knowledge questionnaire, implicit knowledge questionnaire, innovative tendencies questionnaire and job performance questionnaire. Structural equation modeling was used for data analysis using SMART PLS.

Results: Findings indicated that innovative tendencies, explicit knowledge and implicit knowledge had a positive significant effect on job performance. Explicit knowledge and implicit knowledge had a positive significant effect on innovative tendencies. In conclusion, findings emphasized the role of knowledge sharing and innovative tendencies on job performance of High School Principals.

Conclusions: The results of this study indicated that the relationship between knowledge Sharing and innovative tendencies and job performance among high school principals could provide valuable guidance for increasing motivation and actualizing their potential powers. As an important predictor of knowledge Sharing and innovative tendencies and job performance played a significant role in As an important predictor of knowledge sharing and innovative tendencies, job performance played a significant role in driving organizational success and fostering a culture of continuous improvement within the educational environment.

Cite this article: Abedini, M. (2024). Relationship between knowledge sharing and innovative tendencies and job performance among high school principals in Bandar Abbas. *Iranian Journal of Educational Research*, 3 (4), 323-344.

DOI: <https://doi.org/10.22034/3.4.323>



© The Author(s).

DOI: <https://doi.org/10.22034/3.4.323>

Publisher: University of Hormozgan.

Introduction

In today's rapidly evolving educational landscape, the ability of schools to harness knowledge sharing and foster innovation has become increasingly critical to their organizational performance. Research indicates that effective knowledge sharing among educators not only enhances teaching practices but also fosters a collaborative culture that can lead to innovative solutions to challenges faced in schools (Levin & Schrum, 2013). Additionally, studies by Dyer and Nobeoka (2000) suggest that organizations prioritizing knowledge sharing tend to exhibit higher levels of performance and adaptability, enabling them to respond effectively to the diverse needs of students and the community.

This article will explore key dimensions of knowledge sharing, including its role in professional development and the importance of creating a supportive environment that encourages collaboration and creative thinking. By analyzing various case studies and empirical research, the aim is to provide insights into how schools can leverage knowledge sharing and innovation to enhance their organizational performance and better serve their students. Thus, this literature review highlights the relationship between knowledge sharing practices and innovation within educational institutions, emphasizing how these factors contribute to overall effectiveness and success. The intersection of knowledge sharing, innovation, and organizational performance is critical in the context of educational institutions. This review explores how effective knowledge sharing can foster innovation in schools and enhance overall organizational performance, ultimately leading to improved student outcomes and a more dynamic educational environment.

Knowledge Sharing: Currently, the most important capital for organizations is their available knowledge. Successful organizations are those that can effectively utilize the most useful, valid, and updated human knowledge in their operations (Mansouri et al., 2011). To improve performance and compete with rivals, organizations require competitive advantages to outperform others in changing and complex conditions and survive in the market. In recent years, the sensitivity of competition has not only increased in the market but its nature has also changed, as the focus of organizations has shifted from investing in tangible resources to investing in intangible resources to achieve superior performance and competitive advantage (Sinaei et al., 2011).

Knowledge management is a specialized and systemic organizational process for acquiring, organizing, storing, using, sharing, and recreating both explicit and implicit knowledge among

employees to increase organizational performance and value creation (Alavi & Leidner, 2001). According to Amin et al. (2001), knowledge management focuses on improving organizational capability. Successful knowledge management requires a new working environment in which knowledge and experience can be easily shared (Oztemel & Arslankaya, 2012).

One of the most important priorities identified by knowledge management theorists is to motivate people to share their knowledge (King, 2006). Knowledge sharing, as a complex but value-creating activity within knowledge management, underlies many organizational strategies (Mansouri et al., 2011; King, 2006; Parke et al., 2014). Although some believe that knowledge is power, it appears that knowledge itself is not power; rather, power derives from the knowledge that people share with others (McDermott & O'Dell, 2001; Alam et al., 2009; Paulin & Suneson, 2015). In the new economy, knowledge serves as a strategic factor in achieving sustainable competitive advantage. However, knowledge assets do not merely create power and value; rather, knowledge sharing within or outside the organization generates new knowledge assets and value (Gholizade & Mirkamali, 2010).

According to Nonaka and Takeuchi (1995), Polanyi implicitly divided knowledge into explicit and tacit groups. They claim that explicit knowledge can be expressed in the form of words and numbers and shared as data, formulas, specifications, instructions, and similar formats. This type of knowledge can be easily coded and transmitted between individuals formally and systematically. Explicit knowledge is typically documented in written materials such as textbooks, manuals, databases, reports, libraries, guidelines, and administrative inputs (Newman, 1999).

On the other hand, tacit knowledge (implicit knowledge) resides in the minds of individuals and is deeply embedded in their actions, experiences, values, and ideals. Intellectual models, intuitions, and imaginations are examples of tacit knowledge. This type of knowledge is nonverbal, inherent, and often unexpressed. While explicit knowledge is communicated through writings, drawings, paintings, and computer programs (Stewart et al., 2001; Wang, Lv, & Duan, 2016), tacit knowledge remains less easily shared.

Studies indicate a positive correlation between knowledge management and job performance (Wang & Wang, 2012; Zheng et al., 2010; Kim & Yun, 2015; Oyemomi et al., 2016).

Knowledge sharing is important because it reduces costs, improves performance, enhances customer service, shortens new product development time, minimizes delays, and decreases the

time required to find and access valuable knowledge within the organization (Alavi & Leidner, 2001; Skyrme, 2002; Dyer & Nobeoka, 2000; Castaneda et al., 2015; Tong et al., 2015). Studies on the effect of knowledge sharing on innovation indicate a positive effect of knowledge sharing on organizational innovation (Wu, 2016; Ritala et al., 2015; Wang & Wang, 2012; Zhang et al., 2010; Cavusgil et al., 2003; Liao et al., 2007; Lin, 2007).

Knowledge sharing has been found to significantly influence job performance and innovative work behavior in various organizational contexts (Noerchoidah et al., 2021; Muhammad Faris Hussain et al., 2022). Innovative work behavior mediates the relationship between knowledge sharing and job performance (Noerchoidah et al., 2021). Personality traits play a crucial role in promoting knowledge-sharing behavior and innovative performance among employees (Mohamed Abou-Shouk et al., 2022). In academic settings, knowledge sharing positively affects innovative behaviors, with an innovative culture acting as both a mediator and a moderator in this relationship (Taylan Budur et al., 2023). However, the quality of work life has been found to have no significant impact on innovative behaviors in higher education institutions (Taylan Budur et al., 2023).

Innovative Tendencies: Schumpeter was the first to express innovation as a scientific concept. He aimed to identify the effective factors influencing the economic growth of countries and recognized the vital role of innovation in the growth of organizations. Innovation involves moving beyond old patterns and is the most important characteristic of a creative mind. Currently, innovation is increasingly recognized as a key factor in maintaining competitive advantage and achieving long-term success in competitive markets. Organizations with high innovation capacity can respond to environmental challenges more quickly and effectively than non-innovative organizations, thereby increasing organizational efficiency (Jimenez-Jimenez et al., 2008).

Innovation is crucial for individuals, institutions, and societies due to its relationship with flexibility and productivity (Runco, 2004). Kerr and Gagliardi (2003) argue that innovation is the most important factor in human growth and progress across all areas. For this reason, innovation is essential for the survival of organizations in today's competitive environment. Organizational innovation refers to the creation or adoption of an idea or behavior and its successful implementation within the organization (Tushman & O'Reilly, 2013).

In the current era, innovation, creativity, and problem-solving are key skills of the knowledge age (Monavarian & Asgari, 2009). Innovation is necessary for the survival of any organization; over

time, non-innovative organizations are eliminated from the competition. An organization that can generate fresh ideas and apply them effectively does not shy away from change but instead acts as a catalyst for change in its environment (Fakhrian, 2002). The innovation capability of an organization is a prerequisite for the successful adoption of new technologies. Additionally, the adoption of new technology brings complex challenges and opportunities for organizations, altering managerial procedures and introducing new problems (Lam, 2004).

In conclusion, it is an undeniable fact that economic growth depends on new and innovative ideas. Approaches and theories of social structure have always focused on a very important indicator known as innovation, considering it a fundamental difference among organizations (Raymond et al., 2015). More innovative organizations are more successful in responding to changing environments by creating and developing new features that enable them to achieve better performance (Montes et al., 2004). It is not coincidental that innovation is currently regarded as the most important factor for sustainable competition (Chen et al., 2015). Therefore, the innovative tendencies of employees are vital for achieving a sustainable competitive advantage (Akman & Yilmaz, 2008). Studies show a significant positive correlation between innovation and performance (Eisingerich et al., 2009; Safarzade et al., 2012; Ren & Zhang, 2015).

Knowledge sharing plays a crucial role in fostering innovative behavior among educators. Studies have shown that knowledge sharing positively influences teachers' innovative work behavior (Dewi et al., 2023; Nguyen et al., 2022; Johan, 2021; Ramdayana & Prasetyono, 2022). Inclusive leadership styles and proactive personalities contribute to increased knowledge sharing and innovative climates in educational settings (Nguyen et al., 2022; Dewi et al., 2023). Trust in coworkers and leaders also promotes knowledge sharing, which, in turn, mediates the relationship between trust and innovative behavior (Johan, 2021). Research conducted in various educational contexts, including elementary schools, high schools, and universities, consistently demonstrates the importance of knowledge sharing in enhancing teachers' innovative tendencies (Dewi et al., 2023; Nguyen et al., 2022; Johan, 2021; Ramdayana & Prasetyono, 2022).

Job performance is the most important issue in any organization. The significance of job performance has prompted researchers to study it more thoroughly (Shokrkon et al., 2001). Job performance is evaluated abundantly in organizations; however, this is meaningful only when understood in the context that the success or failure of an organization depends on the performance

of its employees (Riggio, 2007; Breevaart et al., 2015). Performance is defined as the expected outcomes of distinct behaviors that a person demonstrates during a specific period (Motowidlo, 2003). Job performance is measured by the degree to which tasks are completed by an individual in their job (Suliman, 2006). The human resource development system in any organization must find new ways to improve workforce management, which positively affects performance and employee productivity (Chen et al., 2003; Menguc & Bhuian, 2015).

Knowledge sharing has been shown to positively influence job performance in various organizational contexts. Studies have found that knowledge sharing significantly impacts innovative work behavior, which, in turn, mediates the relationship between knowledge sharing and job performance (Noerchoidah et al., 2021). Cultural factors (Venkatesh et al., 2021), such as sensitivity to image and organizational incentives, can affect knowledge-seeking and providing behaviors, ultimately influencing job performance. In academic settings, knowledge management practices, including knowledge sharing, can improve job performance among educators by enhancing their teaching enthusiasm and broadening their perspectives (Faridzul Adzli bin Mad Adim et al., 2024). Furthermore, research on vocational high school teachers has demonstrated that knowledge sharing positively affects teacher performance, both directly and indirectly, through job satisfaction (Afifuddin Abha et al., 2021).

In the age of knowledge and innovation, one of the key challenges in education is improving the job performance of school principals, who play a significant role in student success and the effectiveness of educational organizations. Knowledge sharing and principals' innovative tendencies can be pivotal in enhancing their performance. School principals face various challenges in management and educational matters, where knowledge sharing serves as a crucial factor in effective problem-solving and decision-making.

Recent research shows that organizational-level knowledge sharing increases self-efficacy, collaboration, and job performance, ultimately fostering productivity and innovation within the organization (Swanson et al., 2020). High school principals in Bandar Abbas, as educational leaders, can improve their job efficiency and effectiveness by promoting a culture of knowledge sharing and fostering innovative tendencies. However, a lack of an appropriate culture for knowledge sharing and limited innovation willingness can hinder job performance improvement and school development.

This research, focusing on high school principals in Bandar Abbas, examines the relationship between knowledge sharing, innovative tendencies, and job performance to gain a deeper understanding of how these factors impact job performance.

In conclusion, literature review shows that few studies have addressed the relationship between knowledge sharing, innovative tendencies and job performance of High School Principals in Bandar Abbas. Therefore, this study examines this relationship to contribute to the literature.

Conceptual Model and Hypotheses: Figure 1 shows the conceptual model developed by reviewing theoretical literature. Obviously, this model considers explicit and implicit knowledge as independent variables, innovative tendencies as mediator and job performance as dependent variable. Therefore, the hypotheses are as follows:

Hypothesis 1: explicit knowledge on innovative tendencies has a significant effect.

Hypothesis 2: implicit knowledge on innovative tendencies has a significant effect.

Hypothesis 3: explicit knowledge on job performance has a significant effect.

Hypothesis 4: implicit knowledge on job performance has a significant effect. .

Hypothesis 5: innovative tendencies on job performance have a significant effect. .

Hypothesis 6: innovative tendencies mediate the relationship between explicit knowledge and implicit knowledge and job performance.

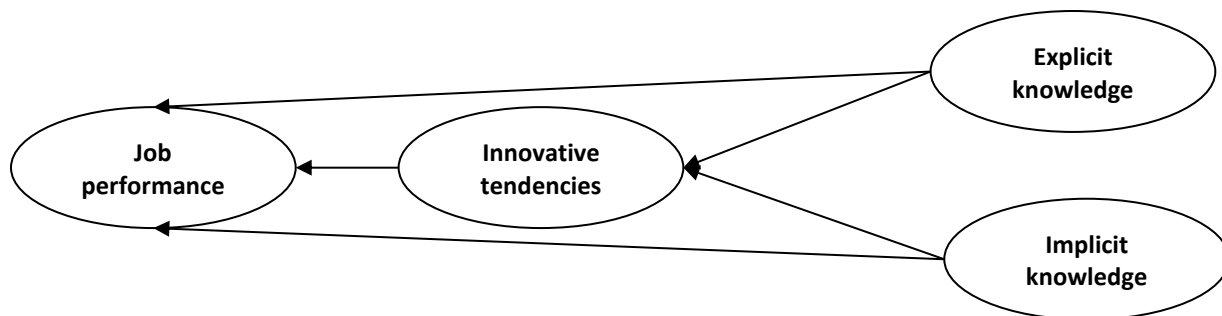


Figure 1. Conceptual model

Material and Methods

This study examined the relationship between variables through a causal model using a descriptive (non-pilot) method and correlation (structural equation modeling) with partial least squares. (Chin, Marcolin and Newsted 1996) suggest this approach for different fields of management in which data is very extensive and there is no relatively sufficient theoretical knowledge and well-established instruments due to their high flexibility and lower limitations compared to LISREL. This study used partial least squares method due to its many advantages over covariance-based approach. Since this study is practical, according to Chin, Marcolin and Newsted (1996), partial least squares method is more suitable for objectives of this study. SMARTPLS was used for data analysis.

Population and Sample: The studied population included high school principals in Bandar Abbas. Out of 100 questionnaires distributed, 95 questionnaires were filled of which 2 were excluded because many questions were left unanswered. Finally, 93 questionnaires were analyzed.

Data Collection:

Knowledge sharing: The Data was collected using knowledge sharing questionnaire (KSQ), a Likert type questionnaire developed by Wang and Wang (2012). This questionnaire consisted of totally 11 items spread over two components- 6 items under Explicit Knowledge, 5 items under Implicit Knowledge.

Innovative Tendencies: to measure innovative tendencies, a 6-item questionnaire was adopted from questionnaires of Jimenez-Jimenez and et al (2008). Items were measured on a 5-point Likert scale from strongly disagree (1) to strongly agree (5).

Job Performance: job performance questionnaire of Patterson (1963) was used to measure job performance. The questionnaire contained 15 items. The items were measured on a Likert Scale.

Results

Validity and Reliability of Questionnaires

Measurement model testing involves evaluation of reliability (internal consistency) and validity (discriminant validity) of the constructs and questionnaires. Fornell and Larcker (1981) suggest three criteria including 1) reliability of each item; 2) composite reliability of each construct; 3)

average variance extracted (AVE). For reliability of each item, the factor loading ≥ 0.6 indicates good reliability of each item of a construct. Moreover, factor loading of the items must be significant at 0.01 (Gefen & Straub, 2005). Boot Strap test was used to calculate t-value to determine significance of factor loadings. Dillon-Goldstein's ρ_c was used to evaluate composite reliability of each construct; ρ_c -values ≥ 0.7 are acceptable. The third criterion is AVE (Fornell & Larcker, 1981). Fornell and Larcker recommend $AVE \geq 0.50$, because it means that the considered construct explains 50% variance or more in its markers (Chin, 1988). Table 1 lists factor loadings, ρ_c and AVE of the studied variables. Values shown in this table indicate sufficiently good reliability of the constructs.

Table 1. Factor loadings, composite reliability and AVE of variables

| Item | Factor loading | Item | Factor loading | Item | Factor loading | Item | Factor loading | Item | Factor loading |
|---|----------------|------------|----------------|--------------|----------------|---------------|----------------|----------------|----------------|
| Explicit 1 | 0.82 | Implicit 1 | 0.76 | Innovation 1 | 0.73 | Performance 1 | 0.66 | Performance 9 | 0.85 |
| Explicit2 | 0.78 | Implicit 2 | 0.74 | Innovation 2 | 0.82 | Performance 2 | 0.82 | Performance 10 | 0.80 |
| Explicit3 | 0.83 | Implicit 3 | 0.78 | Innovation 3 | 0.81 | Performance 3 | 0.83 | Performance 11 | 0.79 |
| Explicit 4 | 0.86 | Implicit 4 | 0.81 | Innovation 4 | 0.87 | Performance 4 | 0.76 | Performance 12 | 0.74 |
| Explicit 5 | 0.90 | Implicit 5 | 0.75 | Innovation 5 | 0.82 | Performance 6 | 0.75 | Performance 13 | 0.72 |
| Explicit 6 | 0.73 | | | Innovation 6 | 0.89 | Performance 7 | 0.80 | Performance 14 | 0.83 |
| | | | | | | Performance 8 | 0.76 | | |
| | | | | | | | | | |
| Cronbach α | 0.90 | | 0.83 | | 0.91 | | | 0.95 | |
| ρ_c | 0.92 | | 0.88 | | 0.93 | | | 0.95 | |
| AVE | 0.67 | | 0.59 | | 0.68 | | | 0.61 | |
| All factor loadings are significant at 0.01 and higher. | | | | | | | | | |

For validity or discriminant validity of the constructs, Chin (1988) suggests two criteria. Items of a construct must have the largest factor loading on their construct (i.e., they must have low sectional loading on other constructs). Gefen and Straub (2005) suggest that factor loading of an item on its construct must be at least 0.1 times greater than factor loading of that item on other constructs. This indicates that correlation of that construct with its markers is higher than its correlation with other constructs. Table 2 reports sectional loads of the items on the constructs.

Table 2. Cross-sectional factor loadings for validity of the questionnaires

| Item/variable | Explicit knowledge | Implicit knowledge | Innovative tendencies | Job performance |
|----------------|--------------------|--------------------|-----------------------|-----------------|
| Explicit 1 | 0.82 | 0.30 | 0.37 | 0.45 |
| Explicit 2 | 0.78 | 0.32 | 0.42 | 0.41 |
| Explicit 3 | 0.83 | 0.41 | 0.55 | 0.52 |
| Explicit 4 | 0.86 | 0.38 | 0.46 | 0.43 |
| Explicit 5 | 0.90 | 0.44 | 0.47 | 0.51 |
| Explicit 6 | 0.73 | 0.37 | 0.39 | 0.35 |
| Implicit 1 | 0.32 | 0.76 | 0.36 | 0.43 |
| Implicit 2 | 0.22 | 0.74 | 0.32 | 0.44 |
| Implicit 3 | 0.37 | 0.78 | 0.41 | 0.51 |
| Implicit 4 | 0.42 | 0.81 | 0.44 | 0.44 |
| Implicit 5 | 0.40 | 0.75 | 0.34 | 0.43 |
| Innovation 1 | 0.27 | 0.21 | 0.73 | 0.36 |
| Innovation 2 | 0.43 | 0.37 | 0.83 | 0.49 |
| Innovation 3 | 0.46 | 0.52 | 0.81 | 0.53 |
| Innovation 4 | 0.53 | 0.41 | 0.87 | 0.60 |
| Innovation 5 | 0.47 | 0.39 | 0.82 | 0.56 |
| Innovation 6 | 0.49 | 0.44 | 0.89 | 0.53 |
| Performance 1 | 0.36 | 0.32 | 0.52 | 0.67 |
| Performance 2 | 0.54 | 0.47 | 0.51 | 0.82 |
| Performance 3 | 0.46 | 0.53 | 0.54 | 0.83 |
| Performance 4 | 0.40 | 0.42 | 0.43 | 0.76 |
| Performance 6 | 0.44 | 0.60 | 0.46 | 0.78 |
| Performance 7 | 0.41 | 0.53 | 0.51 | 0.80 |
| Performance 8 | 0.26 | 0.39 | 0.41 | 0.76 |
| Performance 9 | 0.44 | 0.48 | 0.48 | 0.85 |
| Performance 10 | 0.37 | 0.40 | 0.54 | 0.80 |
| Performance 11 | 0.46 | 0.31 | 0.47 | 0.79 |
| Performance 12 | 0.50 | 0.46 | 0.51 | 0.74 |
| Performance 13 | 0.45 | 0.50 | 0.48 | 0.72 |
| Performance 14 | 0.45 | 0.47 | 0.51 | 0.83 |

According to Table 2, most variables have the highest factor loading on their constructs and the least distance between factor loading related to their construct is higher than 0.1, indicating good validity of the constructs. Table 3 reports the results of correlation and square root of AVE.

Table 3. correlation matrix and square root of AVE

| Variable | 1 | 2 | 3 | 4 |
|--------------------------|--------|--------|--------|------|
| 1. explicit knowledge | 0.82 | | | |
| 2. implicit knowledge | 0.45** | 0.77 | | |
| 3. innovative tendencies | 0.52** | 0.47** | 0.82 | |
| 4. job performance | 0.54** | 0.57** | 0.61** | 0.78 |

Note: all the values on the matrix diameter are square root of AVE.

According to Table 3, square root of AVE of all variables is higher than their correlation with other variables. Therefore, discriminate validity of the variables is true. In addition, the values under the matrix diameter are reported for examining the relationship between variables. Obviously, there is

a positive significant correlation ($P < 0.01$) between explicit knowledge and implicit knowledge ($r = 0.45$), innovative tendencies ($r = 0.52$) and job performance ($r = 0.54$). There is a positive significant correlation ($P < 0.01$) between explicit knowledge and innovative tendencies ($r = 0.47$) and job performance ($r = 0.57$). There is a positive significant correlation ($P < 0.01$) between innovative tendencies and job performance ($r = 0.61$). Table 4 reports descriptive statistics (mean and standard deviation) of variables.

Table 4. Mean, standard deviation of variables

| Variable | Mean | Standard deviation |
|-----------------------|------|--------------------|
| Explicit knowledge | 3.06 | 0.93 |
| Implicit knowledge | 2.68 | 0.84 |
| Innovative tendencies | 2.90 | 0.96 |
| Job performance | 2.77 | 0.83 |

To predict job performance, the suggested conceptual model is examined through structural equation modeling by considering hypotheses. Partial least squares method is used to estimate the model. Boot Strap test is used to calculate t-values to determine significance of path coefficients. Figure 2 shows the model tested for the relationship between variables. As shown in the figure, all path coefficients are positive and significant. Values in the circles represent explained variance of the variables.

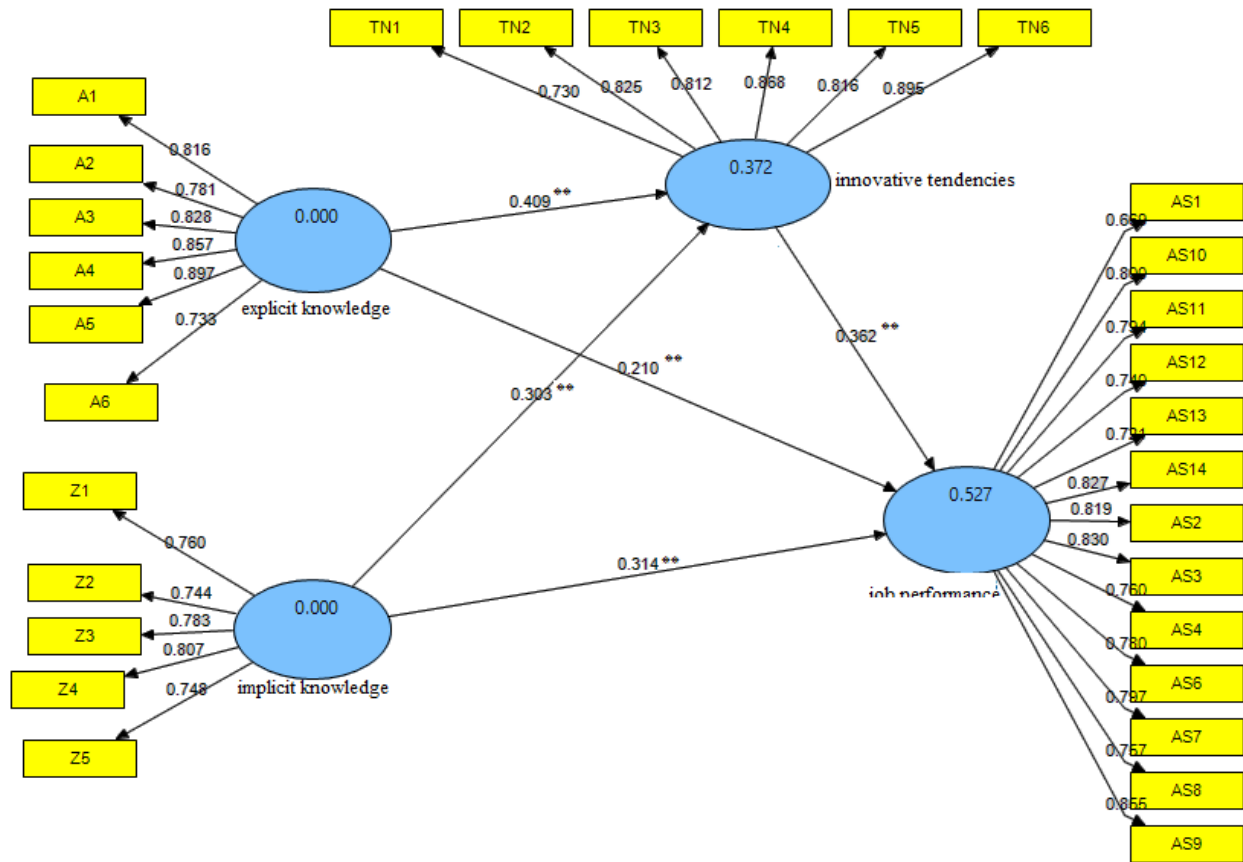


Figure 2. Tested model of job performance

Table 5 reports the estimated path coefficients and AVE for the variables. The values in parentheses are t-values.

Table 5. path coefficients of the explained variance

| Variable | Direct coefficient | Indirect coefficient | Explained variance |
|-------------------------------|--------------------|----------------------|--------------------|
| On job performance vie: | | | |
| Innovative tendencies | 0.36** | - | 0.53 |
| Explicit knowledge | 0.21** | 0.15** | |
| Implicit knowledge | 0.31** | 0.11** | |
| On innovative tendencies vie: | | | 0.37 |
| Explicit knowledge | 0.41** | | |
| Implicit knowledge | 0.30** | | |

* $P < 0.05$; ** $P < 0.01$

As shown in Table 5, the effect of innovative tendencies ($\beta=0.36$), explicit knowledge ($\beta=0.21$) and implicit knowledge ($\beta=0.31$) is positive and significant on job performance ($P < 0.01$). The effect of explicit knowledge ($\beta=0.41$) and implicit knowledge ($\beta=0.30$) is positive and significant

on innovative tendencies ($P < 0.01$). According to Table 4, the model explains 53% variance in job performance and 37% variance in innovative tendencies.

There are methods for validating the model in PLS. These methods which are called cross-validation involve CV-Communality and CV-Redundancy; the former measures quality of the measurement model of each block and the latter, also known as Q^2 , measures quality of the structural model for each endogenous block by considering the measurement model. Positive values indicate good and acceptable quality of the measurement and structural model. As shown in Table 6, positive values of CV-Communality and CV-Redundancy for all variables indicate good and acceptable quality of the measurement and structural model.

Table 6. explained variance, CV-Communality and CV-Redundancy

| Variable | Q^2 (CV-Redundancy) | CV-Communality |
|-----------------------|-----------------------|----------------|
| Explicit knowledge | - | 0.672 |
| Implicit knowledge | - | 0.591 |
| Innovative tendencies | 0.186 | 0.682 |
| Job performance | 0.113 | 0.612 |

In addition to above statistics, total fit index of the model is GOF (goodness of fit) which can be used for validating PLS model as a whole. GOF is able to predict the model generally and determine whether the tested model is successful in predicting endogenous latent variables (Seyed-Abaszade, et al., 2012). In current study, $GOF = 0.54$ indicates good fit of the tested model.

Discussion

The purpose of this study was to examine the relationship between knowledge sharing, innovative tendencies and job performance using structural equations. The results showed that the suggested model was well fitted to the data and could explain 53% variance in job performance and 37% variance in innovative tendencies.

The results of structural equations showed that explicit knowledge has a direct, positive and significant effect on innovative tendencies. This finding is consistent with Wu (2016), Ritala et al (2015), Wang and Wang (2012), Zhang et al (2010), Liao et al (2007) and Lin (2007). Knowledge provides a set of cognitions and skills required for solving a problem. Knowledge expands when people share their knowledge with others; a new knowledge is created when an individual

knowledge is integrated with knowledge of others. This leads to higher tendencies for innovation. Effective knowledge sharing reduces costs of knowledge production, ensures dissemination of best working practices within the organization, allows the organization to solve its problem and, more importantly, leads to innovation (Riege, 2005).

Implicit knowledge has a direct, positive and significant effect on innovative tendencies. This finding is consistent with Wu (2016), Ritala et al (2015), Wang and Wang (2012), Zhang et al (2010), Liao et al (2007) and Lin (2007). Implicit knowledge provides the required context for creativity and innovation among employees, though its transfer mechanism is different from explicit knowledge. In addition, implicit knowledge is effective on individual vision, mentality, values, feelings and actions. Therefore, implicit knowledge influences innovative tendencies of employees by providing the knowledge required for changes to adapt products and services to the changes.

Explicit knowledge has a direct, positive and significant effect on job performance. This finding is consistent with Wang and Wang (2012), Zhang et al (2010), Kim and Yun (2015), Oyemomi et al (2016). Knowledge sharing provides growth opportunities for employees, leads to successful implementation of job duties, provides knowledge and information required for job duties, provides organizational support, provides better conditions for promotion, leads to higher participation in decision making process, leads to higher enthusiasm and satisfaction and thus better job performance. Dyer and Nobeoka (2000) believe that knowledge sharing helps different groups work together, facilitates knowledge exchange, increases organizational learning and realization of individual and organizational goals; this, promotes job performance. The purpose of knowledge management is to maximize profitability and increase organizational effectiveness. Knowledge as a resource is vital for survival and improvement of performance. Success is feasible by achieving a deep knowledge and understanding at all levels.

Implicit knowledge has a direct, positive and significant effect on job performance. This finding is consistent with Wang and Wang (2012), Zhang et al (2010), Kim and Yun (2015), Oyemomi et al (2016). Organizations have to use implicit knowledge of members alongside their explicit knowledge to improve job performance. For this purpose, a suitable environment is required for transfer of this knowledge and communication of employees, because implicit knowledge is often transferred verbally without physical representation of skills.

Innovative tendency has a direct, positive and significant effect on job performance. This finding is consistent with Eisingerich et al (2009), Ren and Zhang (2015) and Safarzade et al (2012). Innovation is a source of systemic change toward growth and perfection. Perfection occurs in a system where innovation, reform and renewal continually happen. Innovative system and society refreshes itself constantly with young talent and new thoughts. In this direction, the organization is equipped with new, advanced techniques, methods and thoughts, synchronizes with the latest advances and knowledge and uses them constantly for optimization. In this case, perfection is guaranteed (Zareimatin, 2005). Innovation capability of an organization is prerequisite for successful use of new technologies. Mutually, adoption of a new technology causes complex challenges and opportunities for organizations; this will change managerial procedures and cause new problems in the organization (Lam, 2004). In fact, innovation leads to growth and development, promoted productivity, increased quality of products and services, success in competition, increased motives of employees and job satisfaction, reduced costs and waste of resources, diversified products and services, reduced administrative bureaucracy and encouraged pragmatism. Therefore, innovative employees will have better job performance when they use innovation in line with organizational goals.

Innovative tendency mediates the relationship between explicit knowledge and implicit knowledge and job performance. Therefore, explicit knowledge and implicit knowledge improve job performance through their effect on innovative tendencies of employees.

Employees provide the context for innovative tendencies in line with constant changes by transferring their knowledge and developing organizational knowledge and influence job performance. Through knowledge sharing, employees are motivated and willing to offer their knowledge, systems and structures support knowledge transfer process, knowledge exchange is recognized and supported within the organization. This enables users of knowledge to solve organizational problems using the created knowledge. The knowledge used to solve a certain problem may lead to production and creation of new knowledge which is evaluated again. In general, knowledge must be used in processes, services and products practically. The organization may not be able to gain competitive advantage if it does not use the created knowledge practically. Dyer and Nobeoka (2000) believes that individual knowledge adds to organizational effectiveness when it is shared in the organization overall (Cummings, 2003). In this regard, the first step in

knowledge management process is to provide the contexts required for facilitating and accelerating knowledge sharing among people and groups.

Research Suggestions Based on Study Findings:

Based on the findings of the article, several research suggestions can be made to gain a deeper understanding of the relationship between knowledge sharing, innovative tendencies, and job performance:

1. Impact of Cultural Factors on Knowledge Sharing and Innovative Tendencies:

Further research can explore the effect of organizational culture and leadership styles on knowledge sharing and innovation motivation. In particular, examining cultural differences in knowledge sharing in educational organizations can provide important insights into creating innovative environments.

2. Longitudinal Study to Assess the Sustainability of Knowledge Sharing Impacts:

Conducting longitudinal studies can help analyze the long-term effects of knowledge sharing and innovation on job performance. Such studies can reveal whether the positive impacts of knowledge sharing on innovation and job performance are sustainable over time.

3. Comparative Study Across Different Educational Organizations: A comparative study between elementary schools, high schools, and universities can clarify how knowledge sharing and innovation influence the performance of managers at different educational levels. These studies can identify which level of education has the greatest need for knowledge sharing and innovation.

4. Analysis of the Mediating Role of Innovative Tendencies: Further research can examine the role of innovative tendencies as a mediating variable between knowledge sharing and job performance. Such studies can help explain how explicit and implicit knowledge impact job performance through enhancing innovation.

5. Analysis of Self-Reported Data Quality: Since this research relies on self-reported data, it is recommended that future studies use mixed methods (qualitative and quantitative) and more objective assessments to examine the relationship between knowledge sharing and job performance in a more accurate manner.

6. Analysis of the Impact of Knowledge Sharing on Mental Health and Job Motivation:

Since knowledge sharing can increase job motivation and job satisfaction, it is suggested that

future research evaluate its impact on the mental health and job motivation of managers to determine how knowledge sharing affects job satisfaction and stability.

7. **Study of Knowledge Sharing as a Tool for Solving Managerial Issues:** Research on the practical applications of knowledge sharing as a tool for solving managerial issues and improving decision-making in schools can demonstrate how explicit and implicit knowledge aids managers in addressing managerial and educational challenges.

These suggestions can assist researchers in exploring various aspects of knowledge sharing and innovation, and in developing practical solutions to improve job performance and organizational success in educational settings.

Research limitations:

This study only studied a sample of High School Principals in Bandar Abbas. Therefore, it is difficult to generalize the findings to other contexts and organizations. Moreover, findings are based on self-reporting data. It is recommended to use qualitative and hybrid methods in future studies for deeper understanding of effective factors on job performance.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Ethics statement

Studies involving human participants provided their written informed consent to participate in this study.

Author contributions

I have participated in the concept and design of the study, preparation of materials, data collection and analysis, and we approve the submitted version.

Funding

The author did (not) receive support from any organization for the submitted work.

Conflict of interest

I declare that this research was conducted in the absence of any commercial or financial relationships that could be interpreted as a potential conflict of interest.

References

- Akman, G., & Yilmaz, S. (2008). Innovative tendencies and firm performance: A case study of the Turkish automotive industry. *International Journal of Innovation Management*, 12(4), 539-558. <https://doi.org/10.1142/S1363919608001772>
- Alam, S. S., Zain, M. Z. M., & Jabar, M. (2009). Knowledge sharing behavior among employees in the organization: An empirical study in Malaysia. *International Journal of Business and Management*, 4(5), 121-129. <https://doi.org/10.5539/ijbm.v4n5p121>
- Alavi, M., & Leidner, D. E. (2001). Review: Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MIS Quarterly*, 25(1), 107-136. <https://doi.org/10.2307/3250961>
- Amin, A., Kadir, A., & Rasyid, R. (2001). Knowledge management: A new paradigm for enhancing organizational performance. *Journal of Management Studies*, 38(5), 861-877. <https://doi.org/10.1111/1467-6486.00266>
- Breevaart, K., Bakker, A. B., & Demerouti, E. (2015). The role of leadership in employee job performance: The importance of shared values and goals. *Journal of Managerial Psychology*, 30(5), 492-507. <https://doi.org/10.1108/JMP-05-2013-0180>
- Castaneda, M. A., et al. (2015). The effect of knowledge sharing on organizational performance: A case study in a public institution. *Journal of Knowledge Management*, 19(3), 579-598. <https://doi.org/10.1108/JKM-04-2015-0158>

- Cavusgil, S. T., et al. (2003). The role of knowledge management in building the market-oriented firm. *International Journal of Market Research*, 45(3), 339-356. <https://doi.org/10.1177/147078530304500305>
- Chen, C. J., & Huang, J. W. (2003). A study of the relationship between knowledge management and organizational performance in Taiwan's high-tech industry. *Journal of Information Science*, 29(6), 429-439. <https://doi.org/10.1177/0165551503297580>
- Chin, W. W. (1988). The partial least squares approach to structural equation modeling. In G. A. Marcoulides (Ed.), *Modern methods for business research* (pp. 295-336). Mahwah, NJ: Lawrence Erlbaum Associates.
- Dillon, W. R., & Goldstein, M. (1984). *Multivariate analysis: Methods and applications*. New York, NY: Wiley.
- Dyer, J. H., & Nobeoka, K. (2000). Creating and managing a high-performance knowledge-sharing network: The Toyota case. *Strategic Management Journal*, 21(3), 345-367. [https://doi.org/10.1002/\(SICI\)1097-0266\(200003\)21:3<345::AID-SMJ111>3.0.CO;2-H](https://doi.org/10.1002/(SICI)1097-0266(200003)21:3<345::AID-SMJ111>3.0.CO;2-H)
- Eisingerich, A. B., Rubera, G., & Seifert, M. (2009). Managing service innovation and inter-organizational relationships. *Journal of Service Research*, 11(4), 412-429. <https://doi.org/10.1177/1094670509339882>
- Fakhrian, M. (2002). Organizational change: A catalyst for innovation. *International Journal of Innovation and Learning*, 1(1), 71-80. <https://doi.org/10.1504/IJIL.2004.004013>
- Faridzul Adzli bin Mad Adim, et al. (2024). The impact of knowledge sharing on job performance among educators in higher education institutions. *International Journal of Educational Management*, 38(1), 102-118. <https://doi.org/10.1108/IJEM-06-2023-0246>
- Gefen, D., & Straub, D. (2005). A practical guide to factorial validity using PLS-GRAPH: Tutorial and annotated example. *Communications of the Association for Information Systems*, 16(1), 91-109. <https://doi.org/10.17705/1CAIS.01605>
- Gholizade, H., & Mirkamali, S. M. (2010). Knowledge management: Creating and sharing value. *Journal of Knowledge Management Practice*, 11(1), 1-8.
- Jimenez-Jimenez, D., & Sanz-Valle, R. (2008). Innovation, organizational learning, and performance. *Journal of Business Research*, 61(3), 299-313. <https://doi.org/10.1016/j.jbusres.2007.06.018>
- Johansen, A. (2021). Trust and innovative behavior in educational settings. *International Journal of Educational Research*, 107, 101695. <https://doi.org/10.1016/j.ijer.2021.101695>
- Kerr, J. L., & Gagliardi, J. (2003). Innovation and its implications for education. *Journal of Technology and Teacher Education*, 11(3), 315-335.

- Kim, S., & Yun, S. (2015). Knowledge sharing and employee job performance: The mediating role of innovative work behavior. *Management Decision*, 53(3), 659-679. <https://doi.org/10.1108/MD-09-2014-0517>
- King, W. R. (2006). The role of motivation in knowledge sharing behavior: A conceptual framework. *Journal of Knowledge Management*, 10(2), 92-107. <https://doi.org/10.1108/13673270610669057>
- Lam, A. (2004). Organizational innovation. In A. B. P. D. A. G. E. B. M. H. D. L. R. T. (Eds.), *The Oxford handbook of innovation* (pp. 56-75). Oxford University Press.
- Levin, B. B., & Schrum, L. (2013). *Innovative leadership in schools*. New York, NY: Teachers College Press.
- Liao, S. H., Wu, C. W., & Hu, C. (2007). Knowledge sharing in a knowledge management system: The case of a Taiwanese bank. *Journal of Knowledge Management*, 11(3), 100-115. <https://doi.org/10.1108/13673270710762676>
- Mansouri, M., et al. (2011). The impact of knowledge sharing on organizational performance. *Management Research Review*, 34(9), 985-1006. <https://doi.org/10.1108/01409171111174395>
- Menguc, B., & Bhuian, S. (2015). The role of knowledge management practices in enhancing organizational performance: A study of the retail industry. *International Journal of Retail & Distribution Management*, 43(7), 612-628. <https://doi.org/10.1108/IJRDM-10-2013-0208>
- Monavarian, A., & Asgari, A. (2009). Creativity, innovation and organizational effectiveness. *International Journal of Innovation Management*, 13(1), 21-38. <https://doi.org/10.1142/S1363919609002325>
- Motowidlo, S. J. (2003). Job performance. In I. B. Weiner (Ed.), *Handbook of psychology: Industrial and organizational psychology* (Vol. 12, pp. 39-53). Hoboken, NJ: Wiley.
- Newman, M. (1999). The impact of explicit knowledge on organizational performance. *Knowledge Management Research & Practice*, 1(1), 23-32. <https://doi.org/10.1057/palgrave.kmrp.8500003>
- Nguyen, T. L., et al. (2022). The influence of leadership styles on knowledge sharing and innovative climate in education. *Education + Training*, 64(6), 721-736. <https://doi.org/10.1108/ET-02-2021-0063>
- Nonaka, I., & Takeuchi, H. (1995). *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. New York, NY: Oxford University Press.
- Oztemel, E., & Arslankaya, S. (2012). Knowledge management and organizational learning: The relationship between two concepts. *International Journal of Information Systems and Change Management*, 6(2), 139-158. <https://doi.org/10.1504/IJISCM.2012.047348>
- Paulin, D., & Suneson, K. (2015). Knowledge sharing in organizations: A review of the literature. *Journal of Knowledge Management*, 19(4), 473-496. <https://doi.org/10.1108/JKM-05-2014-0188>

- Raymond, L., et al. (2015). Innovation and its impact on organizational performance: A longitudinal study. *Technovation*, 35, 1-12. <https://doi.org/10.1016/j.technovation.2014.06.005>
- Ren, Y., & Zhang, C. (2015). The relationship between innovation and organizational performance: Evidence from China. *Journal of Business Research*, 68(2), 360-368. <https://doi.org/10.1016/j.jbusres.2014.06.007>
- Riege, A. (2005). Three-dozen knowledge-sharing barriers managers must consider. *Journal of Knowledge Management*, 9(3), 18-35. <https://doi.org/10.1108/13673270510610439>
- Riggio, R. E. (2007). *Introduction to industrial/organizational psychology*. Upper Saddle River, NJ: Pearson.
- Ritala, P., Olander, H., & Michailova, S. (2015). Knowledge sharing and innovation in SMEs: A study of the role of knowledge management practices. *Journal of Knowledge Management*, 19(4), 724-740. <https://doi.org/10.1108/JKM-04-2015-0136>
- Runco, M. A. (2004). Creativity. In R. J. Sternberg (Ed.), *Handbook of intelligence* (pp. 433-454). Cambridge, UK: Cambridge University Press.
- Safarzade, K., et al. (2012). Innovation and performance: Evidence from Iranian SMEs. *International Journal of Business and Management*, 7(8), 77-84. <https://doi.org/10.5539/ijbm.v7n8p77>
- Sinaei, A., et al. (2011). Knowledge management practices: An important factor in organizational performance. *Journal of Knowledge Management*, 15(4), 547-563. <https://doi.org/10.1108/13673271111174987>
- Skyrme, D. J. (2002). *The new knowledge management: The organization as a knowledge marketplace*. New York, NY: Berrett-Koehler.
- Stewart, T. A., et al. (2001). The new knowledge management: What every manager should know. *International Journal of Information Management*, 21(6), 467-479. [https://doi.org/10.1016/S0268-4012\(01\)00037-6](https://doi.org/10.1016/S0268-4012(01)00037-6)
- Suliman, A. (2006). Work performance: A new measure of organizational effectiveness. *International Journal of Organizational Analysis*, 14(3), 249-263. <https://doi.org/10.1108/19348830610690677>
- Swanson, E., et al. (2020). *Leader competencies in promoting knowledge sharing and job performance*.
- Taylan Budur, M., et al. (2023). The mediating role of innovative culture in the relationship between knowledge sharing and innovative behaviors among educators. *International Journal of Educational Management*, 37(5), 1235-1253. <https://doi.org/10.1108/IJEM-05-2022-0223>

- Tong, L., et al. (2015). Knowledge sharing and innovative performance: The mediating role of knowledge creation. *Knowledge Management Research & Practice*, 13(1), 49-58. <https://doi.org/10.1057/kmrp.2014.28>
- Tushman, M. L., & O'Reilly, C. A. (2013). *Organizational ambidexterity: Strategic exploitation and exploration*. In D. J. Teece (Ed.), *The competitive challenge: Strategies for the new competitive landscape* (pp. 3-18). Cambridge, MA: Cambridge University Press.
- Venkatesh, V., et al. (2021). Cultural factors and knowledge sharing: A review of the literature. *Journal of Knowledge Management*, 25(2), 346-364. <https://doi.org/10.1108/JKM-06-2020-0412>
- Wang, Y., & Wang, Y. (2012). Knowledge sharing, innovation, and firm performance: A study of Chinese firms. *Journal of Business Research*, 65(2), 184-189. <https://doi.org/10.1016/j.jbusres.2011.03.004>
- Wang, Y., Lv, Y., & Duan, Y. (2016). Knowledge management and performance: A study of Chinese manufacturing firms. *Journal of Knowledge Management*, 20(4), 826-840. <https://doi.org/10.1108/JKM-03-2016-0114>
- Wu, L. (2016). The impact of knowledge sharing on organizational innovation: A case study of the service industry. *International Journal of Contemporary Hospitality Management*, 28(7), 1535-1550. <https://doi.org/10.1108/IJCHM-02-2015-0055>
- Zareimatin, H. (2005). Innovation and its role in organizational effectiveness. [Publisher information].
- Zhang, J., Wang, H., & Hu, Y. (2010). Knowledge sharing and innovation performance: The role of social capital. *Journal of Knowledge Management*, 14(3), 350-361. <https://doi.org/10.1108/13673271011050130>
- Zheng, W., et al. (2010). The role of knowledge sharing in organizational performance: An empirical study in China. *International Journal of Information Management*, 30(3), 227-236. <https://doi.org/10.1016/j.ijinfomgt.2009.08.002>